

In the Specification:

The paragraph starting at line 15 on page 8 is amended as follows:

Figure 10 is a generally perspective, exploded view of the front
portion of the apparatus of the invention shown in Figure 2.

In the Specification:

The paragraph starting at line 17 on page 8 is amended as follows:

Figure 10A is ~~a~~ an enlarged generally perspective, exploded ~~rear~~
view of the ~~forward~~ rear portion of the apparatus as shown in figure 10.

In the Specification:

Following the paragraph starting at line 17 on page 8, add the following new paragraph:

Figure 14 10B is an end view of the snap together housing component shown in the lower left hand portion of Figure 14A exploded view of the flow rate control portion of the apparatus as shown in Figure 2.

In the Specification:

The paragraph starting at line 10 on page 11 is amended as follows:

Figure 34 is a generally perspective, exploded view of the forward portion of the apparatus of the invention shown in Figure 28.

In the Specification:

The paragraph starting at line 12 on page 11, add the following new paragraph:

Figure 34A is a generally perspective, exploded view of the rear portion of the apparatus of the invention.

In the Specification:

The paragraph starting at line 16 on page 12 is amended as follows:

~~Figure 45 is~~ Figures 45A, 45B, 45C and 45D when considered together comprise a generally diagrammatic, tabular view illustrating and describing the various types of springs that can be used as the stored energy source of the invention. (hereinafter referred to as Figure 45)

In the Specification:

The paragraph starting at line 13 on page 16 is amended as follows:

After opening of the slidable vial closure 73, which forms a part of the third portion 34c of housing 34 (figure ~~10~~ 10A), vial 58 can be inserted into chamber 55. As the fill vial is so introduced and the plunger 70 is threadably interconnected with end 60a of support 60, the sharp end of the elongated needle 64 will pierce the central wall 70a of the elastomeric plunger. Continuous pushing movement of the vial into chamber 55 will cause the structural support to move the elastomeric plunger inwardly of the vial chamber 68 in a direction toward the second or closed end 68b of the vial chamber. As the plunger is moved inwardly of the vial, the fluid contained within the vial chamber will be expelled there from into the hollow elongated needle 64. As best seen in figure 2, the fluid will then flow past elastomeric umbrella type check valve 76 and into a passageway 78 formed in third portion 34c of the apparatus housing. Umbrella type check valve 76 functions as a check valve to control fluid flow from the elongated hollow needle 64 toward fluid passageway 78. From passageway 78 the fluid will flow into passageway 48 and then into reservoir 38 of the bellows component 36 via ullage filling channel or inlet 40.

In the Specification:

The paragraph starting at line 19 on page 20 is amended as follows:

Referring to figures 17 through 26, it can be seen that flow control assembly 104 comprises an outer casing 106 having a plurality of circumferentially spaced apart fluid outlets 108, a flow control member 100, which is telescopically receivable within casing 106 and a selector knob 112 that is interconnected with control member 100 in the manner best seen in figure 23. As illustrated in figures 17A and 20, flow control member 100 is uniquely provided with a plurality of elongated, micro-fluidic flow control channels 114, each having an inlet 114a and an outlet 114b. The flow channels may be of different sizes, lengths, widths, depths and configurations as shown by figure 21, which depicts an alternate form of the flow control member having flow channels 115a, 115b, 115c, 115d, and 115e. The flow channels identified by the numerals 117a and 117b in figure 21A, which illustrates yet another form of flow control member of the invention, can be of still another configuration. Here the flow channels define circuitous flow paths in a plurality of individually, spaced-apart flow segments. Further, the flow control channels may be rectangular in cross-section as illustrated in figure 18, or alternatively, they can be semicircular in cross-section, U-shaped in cross-section, or they may have any other

cross-sectional configuration that may be appropriate to achieve the desired fluid flow characteristics. The flow control channels may also be coated, if appropriate, with a coating "C" or alternate surface treatment (see figure ~~11~~ 18) of the character previously described herein. When the flow control member is properly positioned and bonded within outer casing 106, the inner surface of the outer casing wall cooperates with channels 114 (figure 20) to form a plurality of generally spiral shaped fluid flow passageways of different overall lengths and flow capacities. When the flow control member is positioned within the outer casing, a notch 100b formed in member 100 receives a tongue 106a provided on casing 106 so precisely align the outlets 114b of the flow channels 114 with fluid outlets 108 formed in casing 106. It is to be understood, the suitable O-rings, generally designated as "O" are used to sealably interconnect the completed assembly (see figure 19) to outer housing 96.

In the Specification:

The paragraph starting at line 6 on page 25 is amended as follows:

Selection of the passageway 114 from which the fluid is to be dispensed is accomplished by rotation of the selector knob 112 which, as best seen in figures 20 and 23 includes a reduced diameter portion 112a having a slot 112b formed therein. As illustrated in figures ~~17A~~ 20 and 26, slot 112b is adapted to receive a spline 123 (figure 17A) formed anteriorly of member 100. With this construction, rotation of selector member 112 by gripping a transversally extending finger gripping member 25 will impart part rotation to member 112. As seen in figure 20, inwardly extending spline segment 106a is received within slot 100b formed in the rearward periphery of member 100. Accordingly, rotation of member 112 will also impart concomitant rotation to casing member 106.

In the Specification:

The paragraph starting at line 16 page 32 is amended as follows:

Third portion 172c of housing 172 also includes a chamber ~~48~~ 55 for telescopically receiving a medicament containing fill vial 58, which is identical in construction and operation to that previously described, as is the elongated support 60, which is mounted within first chamber 55. Chamber 55, elongated support 60 and hollow needle 64 together comprise an alternate form of the fill means of the apparatus of this latest form of the invention

In the Specification:

The paragraph starting at line 12 on page 34 is amended as follows:

As the fluid contained within the bellows reservoir 38 is urged outwardly thereof by the stored energy means, the fluid will flow into an outlet passageway ~~192~~ 178 and then into a stub passageway 194 formed in portion 190b of the ullage member 190. Ullage member 190 includes, in addition to portion 190b, a second portion 190a that is housed within bellows 36 (figure 28). After flowing into stub passageway 194, the medicinal fluid will flow into the novel flow control means of the invention that is disposed within ullage portion 190b. This important flow rate control means functions to precisely control the rate of fluid flow outwardly from reservoir 38 and toward the patient.

In the Specification:

The paragraph starting at line 17 on page 41 is amended as follows:

Multiwave compression springs, an example of which is shown as "F" in figure ~~19B~~ 45B are readily commercially available from sources, such as the Smalley Company of Lake Zurich, Illinois. As previously discussed, such springs operate as load bearing devices. They can take up play and compensate for dimensional variations within assemblies. A virtually unlimited range of forces can be produced whereby loads built either gradually or abruptly to reach a predetermined working height. This establishes a precise spring rate in which load is proportional to deflection, and can be turned to a particular load requirement.